SYLLABUS

CHEMISTRY 107	GENERAL CHEMISTRY I	FALL 2009
SECTIONS 51-52	6:00 pm - 8:20 pm, MW	CNSB 100

Instructor: Dr. Emad El-Giar, CNSB 124, Tel: 342-1832

e-mail: elgiar@ulm.edu

Office Hours: Monday: 9:00-10:00 a.m.

Monday: 8:30-9:30 p.m. Tuesday: 9:00-10:00 a.m. Wednesday: 8:30-9:30 p.m. Thursday: 1:00-2:00 p.m.

Prerequisites: Eligibility for Math 111

Text: Chemistry, The Central Science

Eleventh Edition: Brown, LeMay, Bursten, and Murphy

Requirements: Access to MasteringChemistry website for online homework; calculator

Five (5) blank scantron sheets (red, A4 size) to be turned in to me by the end of

the first week of class.

Course content and proposed schedule (please see scheduling note on page 3 of syllabus)

<u>Chapter</u>	<u>Topics</u>	<u>Tests</u> (date)
1,2,3	Introduction, Units Atoms, Molecules, Ions Stoichiometry	#1, 125 pts (9/18/09) (1:00 pm - 2:30 pm)
4,5,6	Acids-Bases, Thermochemistry Redox Reactions, Atomic Structure (1	#2, 125 pts (10/16/09) :00 pm - 2:30 pm)
7,8,9	Periodicity, Chemical Bonding Molecular Structure	#3, 125 pts (11/13/09) (1:00 pm - 2:30 pm)
10,11,13	Gas Laws, Intermolecular Forces Solutions, properties of solutions, Comprehensive	#4, 125 pts (12/7/09) (6:00 pm - 7:50 pm)

Other Dates: Please see Fall 2009 Calendar (examples below):

10/23/09 through 10/26/09 – Fall Holiday

11/02/09 – last day to withdraw from a course with assigned \boldsymbol{W}

11/26/09 through 11/27/09 - Thanksgiving Recess

Grading Scale:

85.0 - 100%	510-600 pts	A
75.0 - 84.9%	450-509 pts	В
60.0 - 74.9%	360-449 pts	C
50.0 - 59.9%	300-359 pts	D
0.00 - 49.9%	0-299 pts	F

The four tests will comprise various types of word problems, including descriptions and calculations. All tests will be in multiple choice formats. A calculator is required, and it should feature logarithms,

exponents, reciprocals, etc. Sharing of calculators will not be permitted during a test. The four tests all count toward the grade for the course. The lowest score will <u>not</u> be dropped. Each exam will **build on pre-existing material from the course**, hence, although the Final (test #4) will be based on material from Chapters 10, 11, and 13, it will also be comprehensive. Online homework assignments will be regularly posted throughout the semester to comprise a further 100 available points. Grades will be assigned from the 600 possible points according to the scale shown above.

Testing

During the taking of tests, the integrity of the testing area will be preserved. Once a test starts, students leaving the testing area for any reason will not be allowed to resume taking their tests. Please make adequate bathroom arrangements with yourself before the test starts. Consistent with University policy as elaborated on page 4, there is no reason to have a cell phone in front of you *at any moment* as you take a test, including the time when the test is being handed in and when the student is leaving the testing area. During testing, only pencils, paper, Periodic Tables, calculators, and brains are needed. It is expected that all students registered in all sections of Chemistry 107 will take the exams at the same times. Scores for each test will be posted on Moodle, usually prior to the return of graded tests. Since examination times for tests 1-3 are scheduled outside regular class time, the 50 minutes of each test will be "given back" to the class. To arrange this, one recitation section prior to a test will not meet.

Homework

Online homework will be assigned. Text books purchased at the ULM Bookstore include an electronic bundle from Pearson Publishing which provides an *access code*. Each student must go to www.masteringchemistry.com and register in this course (course ID: CHEM107). You will be asked to enter your access code and the course ID. There will be two homework assignments for each of the twelve chapters, one utilizing Self-Teaching Problems (STP) and another composed of End-of-Chapter Problems (EOC). Completion dates and times for each of the 24 homework assignments will be given in due course. The average percentage scored on homework will constitute another 100-point score.

Recitation

Each section will meet once per week for "recitation" – when problems from the end of each chapter will be worked in class. Each section will be divided – half will meet on Mondays, the other half on Wednesdays from 7:30 to 8:20. Consequently, class will effectively meet from 6:00 to 7:15 p.m and half of the class will meet from 7:30 to 8:20 on Mondays while the other half will meet at the same time on Wednesdays.

Midterm and Endterm grades

Grades at midterm will be reported to each student by **10/15/09**, via the ARROW system. Midterm grades indicate a student's status at mid-semester only and do not indicate the final performance outcome of a student. Endterm grades will be made available via the ARROW system (date to be determined).

Make-up tests

Make-up tests will only be given for students who were absent in order to participate in a University-sanctioned function, or who have a genuine excused absence for such as a family bereavement, or a health problem. (Please see http://www.ulm.edu/studentpolicy/ pages 9-10). It is entirely the student's responsibility to obtain valid documentation for an excused absence. For an excused absence to pass muster authentic documentation is required which specifies the dates absent, and which is signed clearly and legibly by an authorized person. Make-up tests will be given only at the end of the semester (probably during the last week of class – announcement will be made later).

Attendance Policy (elaborated later, please see page 5)

Roll will be taken every day that class meets (i.e. four times per week). Attendance is expected, and is the responsibility of the individual student. If you cannot make it to class, you need to make provision for all class material you missed.

Course Description

Theories and principles of modern chemistry; algebraic approaches to problem solving; descriptive chemistry of elements and compounds. Three lecture hours; one recitation hour.

Instructional Methods and Activities

Students will learn to develop deductive powers through exposure to the Scientific Method -- as shown in Powerpoint presentations of course material, and in solving of associated word problems.

Objectives

To introduce the notion of matter, its phases, its structures

To introduce and distinguish the constituents of matter: atoms, molecules, ions

To introduce measurement by units, and to interconvert units

To understand the term "chemical reaction"

To learn the major classes of chemical reaction, including redox

To learn the concept of stoichiometry and limiting reactant

To introduce the notion of energy exchange accompanying a chemical reaction

To introduce the Periodic Table and correlate it with atomic structure, atomic size and electronegativity

To introduce the notion of bonding as related to energy change and bond order

To learn to draw Lewis structures to represent covalent bonds and bond order in molecules

To implement valence shell electron pair repulsion theory to rationalize molecular shape

To rationalize properties of solids, gases, liquids, and solutions, based on attractive forces

To develop vocabulary of the language of chemistry through all of the above

Student Resources

PowerPoint presentations are posted on Moodle. Scores for each test will also be posted on Moodle. Supplemental Instruction through an experienced student "Group Leader" will also be available.

Scheduling Note

The instructor reserves the right to adjust the given schedule of testing and course content as needed. Any adjustments to the given schedule will be posted on Moodle.

Bonus points

Bonus points will not be available to individuals for activities such as: attending class regularly, asking questions during class, or any other thing expected of all students. After the Final exam, all point earning opportunities are over, and grades will be assigned according to the grading scale given on page 1.

Use of electronic mail

Students are encouraged to use e-mail as one avenue to communicate course-related material and issues with the Instructor. (Visits to Office Hours, and telephone communication are also available, of course). During the semester, the Instructor will endeavor to answer every pertinent e-mail promptly.

After the Final exam is given, the Instructor reserves the right to not reply to individual requests for bonus points, or pleas for "sliding" or curving the grading scale favorably.

Grade communication

Grades will not be communicated to students via e-mail, telephone, conversation, or any other method involving the Instructor. Grades will be made available to students via the ARROW system at the end of the semester.

Academic integrity

Faculty and students must observe the ULM published policy on Academic Dishonesty (for information on this, as well as other policy alluded to throughout this syllabus, please see pages 4 - 11 in the ULM Student Policy Manual – http://www.ulm.edu/studentpolicy/).

Cheating:

Absolutely no cheating will be tolerated during exams. **ANY** attempt to cheat will result in a **ZERO** grade in that exam and may also result in failing the whole class.

Only regular scientific calculators **WITHOUT** graphic displays will be allowed in exams. **NO** other electronic devices will be allowed in the lecture room during exams. Any student caught with any kind of electronic device (no matter if switched on or off) will be considered cheating.

You can surrender your cell phones and other electronic devices at the front table before the exam starts. These are a few examples of what is considered unprofessional conduct. Any of such or other unprofessional actions may result in a **ZERO** grade for the entire course.

The instructor assumes that all students have made themselves familiar with the ULM policy of conduct (http://www.ulm.edu/studentpolicy/). Any student who observes another student acting in any unprofessional way is expected to either address that student personally OR let the instructor know about such conduct. Such information given to the instructor will be treated absolutely discretely.

Course evaluation policy

ULM expects students to complete the online course evaluation (this will be made available toward the end of the semester).

Student Services

Please consult the Student Services website at http://www.ulm.edu/studentaffairs/ for information on Student Success, Student Counseling, Student health, and Special Needs

University Cell Phone Policy:

Cell phones should be turned off or set to vibrate when in academic buildings (including the University Library) and may be used only in restrooms, group study rooms, and offices. Text messaging may be used throughout the Library (with the exception of the classrooms) provided that no audible sound is used to notify the recipients.

All people carrying cell phones into a classroom, laboratory, or clinic must turn off and store (e.g., in a backpack, purse, phone holster, or other similar item) their phones prior to entering the room. Cell phones are not allowed on desk or table tops. If there is an extenuating circumstance that requires the cell phone to be on during a class, the student must obtain permission from the instructor prior to the beginning of class

and must operate the phone in a silent (vibrate only) mode. Each instructor may further restrict the use of cell phones in class and may determine the consequences for violations of this policy.

People who violate this cell phone use policy may be asked to leave the building.

University Policy on Attendance:

This policy replaces the one published in the 2007-2008 Undergraduate Catalog.

- 1. Class attendance is regarded as an obligation and a privilege, and all students are expected to attend regularly and punctually all classes in which they are enrolled. Failure to do so may jeopardize a student's scholastic standing and may lead to suspension from the University.
- 2. Any student who is not present for at least 75% of the scheduled class sessions in any course may receive a grade of **W** if this condition occurs prior to the last day to drop a course or a grade of **F** after that date.
- 3. Any University-related activity requiring an absence from class will count as an absence when determining if a student has attended 75% of class meetings.
- 4. Students are responsible for the effect absences have on all forms of evaluating course performance. Thus, the student is responsible for arranging the allowed make up of any missed work.

Add and Drop Policy (This policy replaces the one published in the 2007-2008 Undergraduate Catalog.)

Students will not be admitted to any class unless the instructor has received a roster or notice indicating proper registration from the Registrar.

Students will not be permitted to add or drop courses after the published add and drop date without their dean's approval.

Students may not enroll in more than one section of the same course unless specified in the University catalog.

Class prerequisites must be completed as prescribed by the most current catalog, regardless of the catalog or curriculum in effect for any student.

All students are encouraged to consult with their academic advisor before adding or dropping a course; however, to add or drop a course, freshmen must obtain a signed Drop/Add form from their academic advisor, department head, or dean. To be added into a full course, students must also obtain the signature of the dean responsible for the course. Students must submit completed Drop/Add forms at the Registrar's Office.

For non-freshmen, adding and dropping courses must be completed via ARROW (arrow.ulm.edu). Students using ARROW are strongly encouraged to print a copy of the screen displayed when they drop a course and to verify that they have been removed from the course by reviewing their course schedule.

A student may drop any subject with a notation of "W" (withdrawn from class) within the time limit specified in the University Calendar. Withdrawals during that period carry no academic penalties. Failure to withdraw from a course during that period may result in a course grade of **F**.

Emergency Procedures

In the event of fire, or whenever the fire alarm sounds, students will evacuate the building in an orderly manner and assemble outside in a safe location.

In the event of danger, generally, students should use their cell phones to contact ULM police at 1-911

General security information can be found at http://www.ulm.edu/~police/ the home page of the ULM police